Petrothene

NA336

Low Density Polyethylene
Film Extrusion Grade
Melt Index: 6.5 Density: 0.920

Applications

Petrothene NA336 is a series of homopolymer resins selected by customers for applications that require thin gauge film constructions. NA336 resins are known for their consistency, excellent drawdown and processability.

Regulatory Status

The NA336 resins meet the requirements of the Food and Drug Administration, regulation 21 CFR 177.1520. This regulation allows the use of this olefin polymer "in... articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar product safety representative for more information.

Processing Techniques

The melt strength properties of these resins result in excellent bubble stability. These resins can be processed over a wide range of temperatures; however, recommended conditions are melt temperatures between 300°- 330°F (149°- 166°C) and a blow-up ratio between 2.0-2.5:1. Using proper techniques and equipment, drawdown to 0.25 mil (6 microns) is feasible at commercial production rates. Specific recommendations for processing NA336 resins can be made only when the processing conditions, equipment and end use are known.

Typical Properties

Property	Nominal Value	Units	ASTM Test Method
Melt Index	6.5	g/10 min	D1238
Density	0.920	g/cc	D1505
Vicat Softening Point	85	°C	D525
Film*			
Haze	8	%	D1003
Gloss, 45°	62		D2457
Dart Drop Impact Strength, F_{50}	90	g	D1709
Tensile Strength, MD (TD)	2,500 (2,020)	psi	D882
Elongation, MD (TD)	225 (450)	%	D882
1% Secant Modulus, MD (TD)	21,200 (24,000)	psi	E111
Elmendorf Tear Strength, MD (TD)	350 (150)	g	D1922

Product	NA336149
Slip (ppm)	1,350
Antiblock (ppm)	4,000

* Data obtained from film produced on a 3½" (89 mm) blown film line, commercially available 8" (203 mm) die, 325°F (163°C) melt extrusion temperature, 2.2:1 BUR, 1.25 mil (32 micron) gauge.

These are typical values not to be construed as specification limits.